

IN THE CLAIMS

1. [cancelled]

2. [cancelled]

3. [cancelled]

4. [cancelled]

5. [cancelled]

6. [cancelled]

7. [cancelled]

8. [cancelled]

9. [original] A process for computing accounting information pertaining to a transaction that crosses business boundaries in a value chain having two or more participating businesses or entities, comprising the steps:

(1) identifying a buyer participant in a transaction that crosses business boundaries using the consumer identification code in an RDR data structure;

(2) identifying a seller participant in said transaction using a customer identification code in said RDR data structure recording data of said transaction;

(3) identifying a product type involved in said transaction;

(4) identifying a product instance involved in said transaction;

(5) identifying a price plan which records data defining the terms which govern calculation of charges for units of said product type consumed in said transaction;

(6) calculating a payment amount using a price per unit from said price plan and a number of units consumed from said RDR recording data pertaining to said transaction;

(7) finding a balance object which records the monetary balance as between said buyer participant and said seller participant in said transaction, and adding or subtracting the calculated payment amount of a balance recorded in said balance object, as appropriate;

(8) determining if there is another tier in said value chain;

(9) if there is another tier in said value chain, selecting two participant identification codes for participants on said tier and repeating steps (1) through (7) using said RDR and said two participant identification codes selected in this step 9 as said consumer and customer identification codes as appropriate;

repeating steps (8) and (9) as many times as is necessary to process account balances between all participants on all tiers in said value chain.

10. [original] The process of claim 9 wherein said step of identifying a product type is accomplished by reading a resource type field in said RDR data structure.

11. [original] The process of claim 9 wherein said step of identifying a product instance is accomplished by searching all product instances data objects for ones which have pointers to said buyer participant involved in said transaction, and searching the resulting product instance data objects for the one which has a pointer to said product type involved in said transaction.

12. [original] The process of claim 9 wherein said step of identifying a price plan involves following pointers in said product type and product instance data objects which both point to a data object recording the appropriate price per unit price plan pertaining to this transaction.

13. [original] The process of claim 9 wherein said step of determining whether there is another tier in said value chain comprises determining if there is a valid supplier ID in said RDR.

14. [currently amended] The process of claim 9 wherein step (9) comprises copying the current

RDR to a new RDR but shifting the participant IDs so that the original customer ID is the consumer ID in the new RDR and the supplier ID in the original RDR is the customer ID in the new RDR or just modifying the by shifting the participant IDs so that the customer ID in the original RDR is shifted to the consumer ID field in the modified RDR and the supplier ID in the original RDR is shifted to the customer ID field in the modified RDR.

15. [original] A computer readable medium having computer-executable instructions stored thereon for controlling a computer to perform a method comprising the steps:

(1) identifying a buyer participant in a transaction that crosses business boundaries using the consumer identification code in an RDR data structure;

(2) identifying a seller participant in said transaction using a customer identification code in said RDR data structure recording data of said transaction;

(3) identifying a product type involved in said transaction;

(4) identifying a product instance involved in said transaction;

(5) identifying a price plan which records data defining the terms which govern calculation of charges for units of said product type consumed in said transaction;

(6) calculating a payment amount using a price per unit from said price plan and a number of units consumed from said RDR recording data pertaining to said transaction;

(7) finding a balance object which records the monetary balance as between said buyer participant and said seller participant in said transaction, and adding or subtracting the calculated payment amount of a balance recorded in said balance object, as appropriate;

(8) determining if there is another tier in said value chain;

(9) if there is another tier in said value chain, selecting two participant identification codes for participants on said tier and repeating steps (1) through (7) using said RDR and said

two participant identification codes selected in this step 9 as said consumer and customer identification codes as appropriate;

repeating steps (8) and (9) as many times as is necessary to process account balances between all participants on all tiers in said value chain.

16. [original] The computer readable medium of claim 15 wherein the computer-executable instructions stored thereon further control a computer to execute the following steps: identifying a product type by reading a resource type field in said RDR data structure.

17. [original] The computer readable medium of claim 15 wherein the computer-executable instructions stored thereon further control a computer to execute the following steps:

identifying a product instance by searching all product instances data objects for ones which have pointers to said buyer participant involved in said transaction, and searching the resulting product instance data objects for the one which has a pointer to said product type involved in said transaction.

18. [original] The computer readable medium of claim 15 wherein the computer-executable instructions stored thereon further control a computer to execute the following steps:

identifying a price plan by following pointers in said product type and product instance data objects which both point to a data object recording the appropriate price per unit price plan pertaining to this transaction.

19. [original] the computer readable medium of claim 15 wherein the computer-executable instructions stored thereon further control a computer to execute the following steps:

determining whether there is another tier in said value chain by determining if there is a valid supplier ID in said RDR.

20. [original] The computer readable medium of claim 15 wherein the computer-executable instructions stored thereon further control a computer to execute the following steps:

copying the current RDR to a new RDR but shifting the participant IDs so that the original customer ID is the consumer ID in the new RDR and the supplier ID in the original RDR is the customer ID in the new RDR or just modifying original RDR by shifting the participant IDs

so that the customer ID in the original RDR is shifted to the consumer ID field in the modified RDR and the supplier ID in the original RDR is shifted to the customer ID field in the modified RDR.